

100  
 101     **Bold** = objects  
 102     *Italic* = actions (methods, code members)  
 103  
 104     **Core**  
 105  
 106     MailAlert ISP 203 is the provider of the **MailAlert (software on server 215)** service.  
 107     **MailAlert** relies on a **Mail Server (software on server 215)** package for **Mail**  
 processing.  
 108     The **Mail Server** receives **Mail for Customers** (e.g. **message sent by 210**) and *forwards*  
 it to their permanent mail address (e.g. Workstation 212 on ISP2 204), also *stores* a **Mail**  
**Copy (on server 215)**.  
 109     An **Alert** (e.g. **data content of pager message**) is a basic information provided by  
**MailAlert** to **Customers** (e.g. using **pager 217 via paging network 232**).  
 110     The **Mail Filter** (also **software on server 215**) *analyzes* the **Mail Copy (content of e-**  
**mail message)**, looking for **Interest Criteria** (in **database on server 215**). When a  
*match is found*, an **Alert** is generated.  
 111     Alerts are records in an **Alert Table** (also **database on server 215**). For each **Alert**  
**Record**, a **Pager Message** will be generated using **Sends Alerts (software on server**  
**215)**.  
 112     Every **Alert** is stamped with a unique identifier for the **Customer** receiving it.  
 113     A **Customer**, using the **Alert** identifier can *request* from a **MailAlert Auto Attendant**  
 the whole contents of the **Mail Copy** to be faxed to them (on Fax machine 216) or  
 forwarding to a special e-mail address (e.g. mobile device 211). The **MailAlert Auto**  
**Attendant** will *add* a **Fax Back Record** into a **Fax Back List (database on server 215)**.  
 114     For each **Fax Back Record**, a **Fax Message** will be generated and send using a **Fax**  
**Back Server (software on server 215)**.  
 115  
 116  
 117     **Procedures**  
 118  
 119     Concurrent tasks in service **MailAlert** are  
 120        {  
 121            Receive, Forward Mail; Store Mail Copies  
 122            Filter Mail Copies  
 123            Send Alerts  
 124            MailAlert Auto Attendant  
 125            MailAlert Fax Back Server  
 126            MailAlert Mail Redirector  
 127        }  
 128  
 129  
 130     task Receive, Forward Mail; Store Mail Copies is  
 131        provided by third party Mail Server package for release 1.0  
 132  
 133     task Filter Mail Copies is  
 134        forever  
 135        Wait For New MailCopy

```

136      MailCopy :: GetCustomer() :: FindMatchAlertCriteria( MailCopy,
137      AlertTable )
138  task Send Alerts is
139    forever
140      if not AlertTable :: isEmpty() then
141        AlertTable :: currentRecord :: SendAlert()
142        AlertTable :: currentRecord :: delete
143
144  task MailAlert Auto Attendant is
145    forever
146      Wait For Customer Call
147      Request Parameters( Customer Id, Alert Id,Fax/Mail )
148      if Fax then FaxBackList :: AddFaxBackRecord( CustomerId, AlertId )
149      if Mail then Forward (CustomerId, AlertId, AltMailAdd )
150
151
152
153
154
155  task MailAlert Fax Back Server is
156    forever
157      if not FaxBackList :: isEmpty() then
158        FaxBackList :: FirstRecord() :: GenerateFax()

```

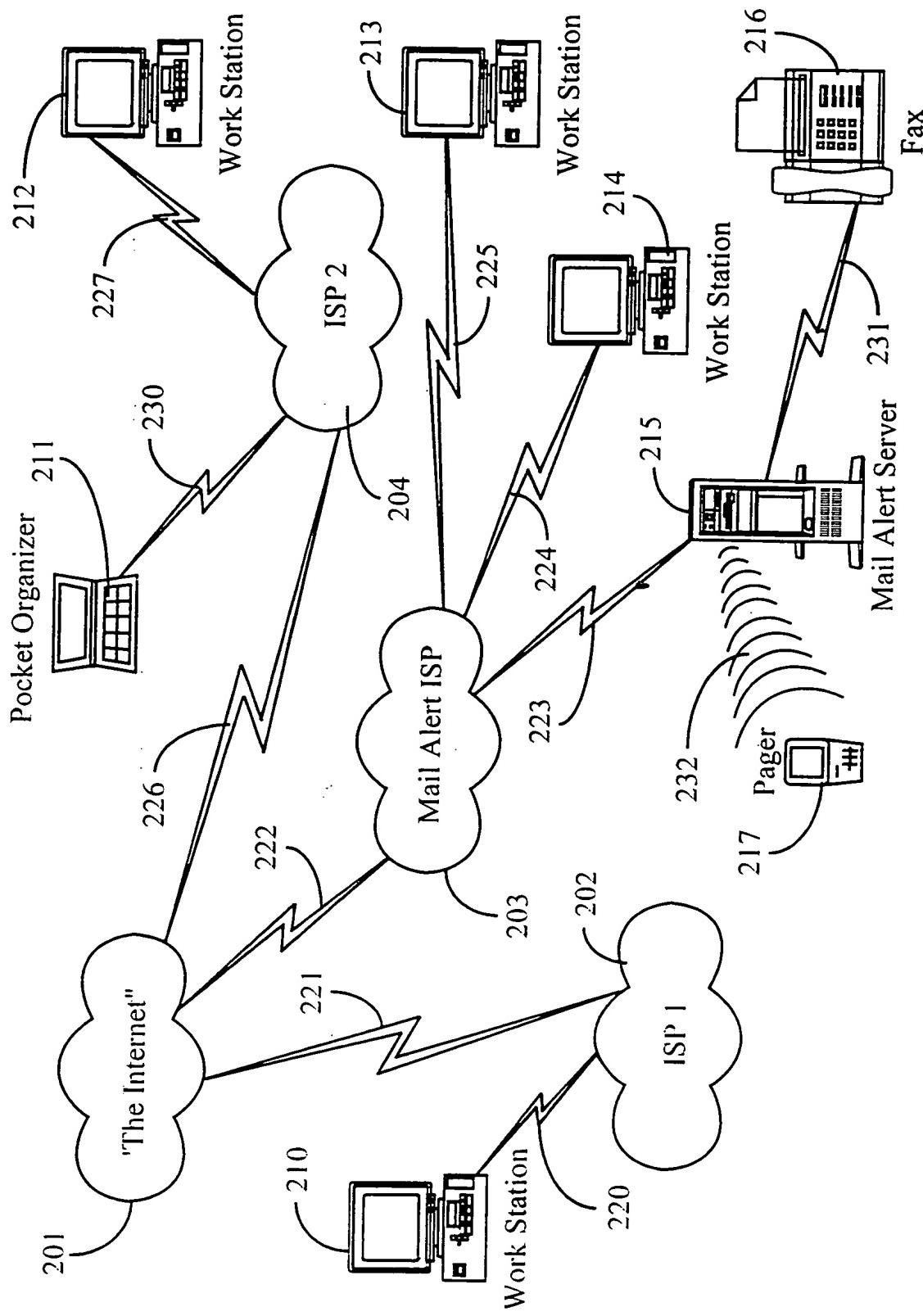


Fig. 2